



UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office

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SERIAL NUMBER	FILING DATE	INVENTOR FIRST NAMED APPLICANT	ATTORNEY DOCKET NO.
0770241-78	05/22/87	NILSSEN	

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BARRINGTON, IL 60010

NICKERSEN EXAMINER	
ART UNIT	PAPER NUMBER
	4

DATE MAILED: 01/07/88

This is a communication from the examiner in charge of your application.

COMMISSIONER OF PATENTS AND TRADEMARKS

- ☐ This application has been examined ☒ Responsive to communication filed on October 26, 1987 ☒ This action is made final.

A shortened statutory period for response to this action is set to expire 3 month(s), \_\_\_\_\_ days from the date of this letter.  
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

- |  |   |
|--|---|
| 1. <input type="checkbox"/> Notice of References Cited by Examiner, PTO-892.       | 2. <input type="checkbox"/> Notice re Patent Drawing, PTO-948.                  |
| 3. <input type="checkbox"/> Notice of Art Cited by Applicant, PTO-1449             | 4. <input type="checkbox"/> Notice of informal Patent Application, Form PTO-152 |
| 5. <input type="checkbox"/> Information on How to Effect Drawing Changes, PTO-1474 | 6. <input type="checkbox"/> _____   |

Part II SUMMARY OF ACTION

1. ☒ Claims 1-15 are pending in the application.  
Of the above, claims \_\_\_\_\_ are withdrawn from consideration.
2. ☒ Claims 5 have been cancelled.
3. ☐ Claims \_\_\_\_\_ are allowed.
4. ☒ Claims 1-4 and 6-15 are rejected.
5. ☐ Claims \_\_\_\_\_ are objected to.
6. ☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.
7. ☐ This application has been filed with informal drawings which are acceptable for examination purposes until such time as allowable subject matter is indicated.
8. ☐ Allowable subject matter having been indicated, formal drawings are required in response to this Office action.
9. ☐ The corrected or substitute drawings have been received on \_\_\_\_\_. These drawings are ☐ acceptable;  
☐ not acceptable (see explanation).
10. ☐ The ☐ proposed drawing correction and/or the ☐ proposed additional or substitute sheet(s) of drawings, filed on \_\_\_\_\_, has (have) been ☐ approved by the examiner. ☐ disapproved by the examiner (see explanation).
11. ☐ The proposed drawing correction, filed \_\_\_\_\_, has been ☐ approved. ☐ disapproved (see explanation). However, the Patent and Trademark Office no longer makes drawing changes. It is now applicant's responsibility to ensure that the drawings are corrected. Corrections MUST be effected in accordance with the instructions set forth on the attached letter "INFORMATION ON HOW TO EFFECT DRAWING CHANGES", PTO-1474.
12. ☐ Acknowledgment is made of the claim for priority under 35 U.S.C. 119. The certified copy has ☐ been received ☐ not been received  
☐ been filed in parent application, serial no. \_\_\_\_\_; filed on \_\_\_\_\_.
13. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.
14. ☐ Other

Art Unit 266

1. This office action is in response to the amendment filed on October 26, 1987.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless-

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(c) he has abandoned the invention.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

3. The following is a quotation of 35 U.S.C. 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) and (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

4. Claims 1-4 and 6-15 are rejected under 35

U.S.C. 103 as being unpatentable over Skwirut et al, Anderson '751 and Nilssen '364.

5. Skwirut et al teach a fluorescent lamp assembly comprising a fluorescent lamp, 14; a base which can be screwed into an Edison-type socket and contain the starting and ballasting components, column 3, lines 14-18; an L-C circuit with the capacitor in parallel to the lamp and in series with the inductor, the capacitor being integral with the lamp, so that, upon the removal of the lamp, the capacitor is also removed; and the L-C circuit operating near resonance of the fundamental frequency of the AC power source.

6. The difference between the claimed subject matter and the teachings of Skwirut et al is the operating frequency and means for obtaining that operation. As has been well in the art, a fluorescent lamp may either operate a 60Hz or a high frequency depending on the choice of the designer. Skwirut et al operate at 60Hz, the claimed subject matter operates at a high frequency. It is also noted that the teachings mention the use of high frequency for operating a fluorescent lamp. The difference is provided for by Anderson '751.

7. Anderson '751 teaches a high frequency circuit for starting and ballasting a fluorescent lamp comprising a rectifier, a high frequency converter, an L-C tank circuit at or near resonance with the capacitor in parallel to the lamp, and the converter being a half bridge inverter.

8. The motivation in the combination of the two

teachings lies in Skwirut et al with the teaching of the starting and ballasting means in the base, and the suggesting of the use of high frequency for operating a fluorescent lamp.

9. It would have been obvious to one of ordinary skill in the fluorescent lamp to include the high frequency means of Anderson '751 in the base of Skwirut et al as a power supply means because Skwirut et al as a power supply means because Skwirut et al teach the use of the power supply in the base and suggest the use of high frequency for operating the fluorescent lamp.

10. To further meet the limitations of the new dependent claims, the teachings of Nilssen '364 is included in this instant rejection. Nilssen '364 shows the use of a saturable core transformer as a feedback transformer in an inverter for a fluorescent lamp. Nilssen '364 also supports the assertion that the L-C series component must resonant near or at the fundamental frequency of the inverter. This inverter also uses a sinusoidal or squarewave output to operate the fluorescent lamp.

11. It would have been obvious to one of ordinary skill in the fluorescent lamp to include the high frequency means of Nilssen '364 in lieu of Anderson '751 because both are teachings of inverters for fluorescent lamps.

12. Claim 6 stands rejected under 35 U.S.C. 102(e) as being anticipated by Skwirut et al.

13. Skwirut et al teach a power supply in an

Art Unit 266

arrangement comprising an AC output voltage being provided whenever the powerline voltage of an utility is present; with a series combination of a choke and condensor, an inductor and a capacitor), across the output of the power supply, being in series resonance at or near fundamental frequency; a gas discharge lamp whose terminals are in parallel to the condensor; a base for adaptation to an Edison-type socket such that all the above are held together to form an integral unit.

13. Claims 6 and 13-15 are rejected under 35 U.S.C. 103 as being unpatentable over Skwirut et al and Nilssen '364.

14. Skwirut et al teach a fluorescent lamp assembly comprising a fluorescent lamp, 14; a base which can be screwd into an Edison-type socket and contain the starting and ballasting components, column 3, lines 14-18; an L-C circuit with the capacitor in parallel to the lamp and in series with the inductor, the capacitor being integral with the lamp, so that, upon the removal of the lamp, the capacitor is also removed; and the L-C circuit operating near resonance of the fundamental frequency of the AC power source.

15. The difference between the claimed subject matter and the teachings of Skwirut et al is the operating frequency and means for obtaining that operation. As has been well known in the art, a fluorescent lamp may either operate at 60Hz or a high frequency depending on the choice of the designer. Skwirut et al operate at 60Hz, the claimed subject matter operates at

a high frequency. It is also noted that the teachings mention the use of high frequency for operating a fluorescent lamp. The difference is provided for by Nilssen '364.

16. Nilssen '364 teaches a high frequency circuit for starting and ballasting a fluorescent lamp comprising a rectifier, a high frequency converter, an L-C tank circuit at or near resonance with the capacitor in parallel to the lamp, and the converter being a half bridge inverter.

17. The motivation in the combination of the two teachings lies in Skwirut et al with the teaching of the starting and ballasting means in the base, and the suggesting of the use of high frequency for operating a fluorescent lamp.

18. It would have been obvious to one of ordinary skill in the fluorescent lamp to include the high frequency means of Nilssen '364 in the base of Skwirut et al as a power supply means because Skwirut et al teach the use of the power supply in the base and suggest the use of high frequency for operating the fluorescent lamp.

19. Applicant's arguments filed October 26, 1987 have been fully considered but they are not deemed to be persuasive.

20. Skwirut et al discloses another way to make the fluorescent lamp more compact in column 12, lines 32-41. He suggests removing any high frequency components from the screw base of the lamp. When one takes

Art Unit 266

away something one can usually make it more compact.

However this statement suggests that high frequency components may be included in the screw base of the lamp, but it may make it more bulkier.

21. The argument by applicant concerning classification is totally irrelevant. The patents are teachings for fluorescent lamps.

22. Applicant's amendment necessitated the new grounds of rejection. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP 706.07(a).

Applicant is reminded of the extension of time policy set forth in 37 CFR 1.136(a). The practice of automatically extending the shortened statutory period an additional month upon the filing of a timely first response to a final rejection has been discontinued by the Office. See 1021 TMOG 35.

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 CFR 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

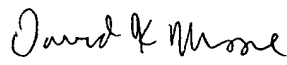
23. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Nickerson whose telephone number is (703) 557-6834.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 557-3321.

M. NICKERSON:mg

(703) 557-6834

12-29-87

  
DAVID K. MOORE  
SUPERVISORY PATENT EXAMINER  
GROUP 260